

1967

Aligning Instructions

For all models mentioned below the repair manual of HF 45 U / Mandello c/U / Locarno c/U and KS 410 U, which has been published for the manufacturing period of 1965, is valid.

AM-IF Alignment 460 kc

The sensitivity values are referred to an output power of 50 mW per channel

Band Position of Variable Capacitor	Coupling of Signal Generator	Alignment	Sensitivity	Remarks
BC Pointer at 1 Mc	G1 EAF 801	(III) and (IV) max.	1.32 mV	Align with alternate damping (10 kΩ and 5 nF in series). IF Selectivity 1 : 100 IF Bandwidth 4 kc
	G1 ECH 81	(I) and (II) max.	18 μV	
BC, tuned in	to antenna jack	(V) inner min.	"	Blocking ratio 1 : 25

AM-Oscillator and Input Circuit Alignment

Band Frequency Pointer Position	Oscillator	Input Circuit	Sensitivity μV	Image Ratio 1 :	Oscillation Current μA	Remarks
BC	560 kc	① max.	③ inner max. ... 7 ...	550 350	570 680 ...	Final pointer pos. "1" of 510 kc. Alignment Sequence: BC-Oscillator, BC input circuit SW I Osc., SW I input circuit SW II Osc., SW II input circuit Align the BC input circuit. Mix. sensitivity 1 Mc at G1 ECH 81 : 21.5 μV
	1450 kc	② max.	④ max. ... 10	200	... 710	
SW I	2.5 Mc	⑤ max.	⑦ max. ... 10 ...	45 25	520 620 ...	
	5.5 Mc	⑥ max.	⑧ max. ... 10	15	... 626	
SW II	8 Mc	⑨ max.	⑪ max. ... 16 ...	9 8	650 700 ...	
	15 Mc	⑩ max.	⑫ max. ... 18	7	... 700	

FM-IF Alignment 10.7 Mc

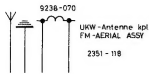
Modulation of Signal Generator	Coupling of Generator	Alignment	Indication	Sensitivity	Remarks
FM	G1 EAF 801	(a) max.	Outputmeter	11 mV	Align with the greatest deviation (± 75 kc) Discriminator alignment with 100 mV IF at G1 EAF 801. Adjust the control R 2 (3 Ω) in filter II with an IF voltage of 300–400 mV to max. AM-suppression (only possible with wobbling oscilloscope). R 2 is to be found above the core (b).
		(b) max.	Outputmeter		
FM	G1 ECH 81	(c) max. (d) max.	Outputmeter	170 μ V	
		wire loop to ECC 85 via 0.5 pF to point (x)			
		(e) inner max. (f) max.			

FM-Oscillator, Intermediate- and Antenna Circuit Alignment

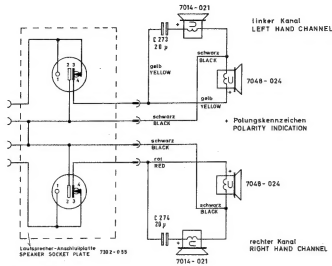
Signal Generator Frequency	Oscillator	Intermediate Circuit	Antenna Circuit	Indication	Oscillat. Voltage	Sensitivity	Remarks
86 Mc	(A) max.	(B) max.	(E) max. *)	Outputmeter	2.4 ... 2.71 =	< 3 kΩ	*) For circuit (E) being very broad, core should be adjusted approx. 2.5 mm below the upper edge of the coil form. Coil must not be detuned. If already detuned, remove and align it separately to 0.85 μH.
104 Mc	(C) max.	(D) max.					

Hum: L. H. Channel / R. H. Channel, L-Pot. shut 0.5 / 0.6 mV, open 0.8 / 0.8 mV

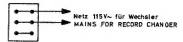
Loudspeaker Wirings



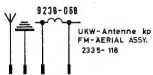
Locarno 1/U



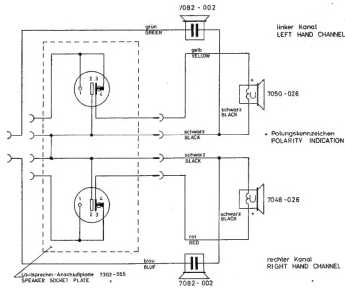
Mandello 1/U



Mandello 1/U



Mandello 1/U

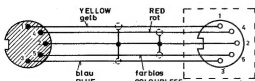


Locarno 1/U

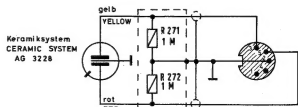


Locarno 1/U

PU-Attenuator in the Changer

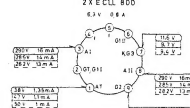


Mandello 1/U
Locarno 1/U



TA-Entzerrer im Laufwerk
PU EQUALIZER IN TURNTABLE

Mandello 1/U
Locarno 1/U



TENSIONS DE SERVICE MESURÉES AU CHASSIS
AVEC GRUNDIG VOLTMÈTRE À LAMPE UNIVERSE
LES TENSIONS DE SERVICE SONT VALABLES
POUR **P2** **F2** **PU** SANS SIGNAL À L'ANTENNE

MODIFICATIONS RESERVEES

Wiederholte Stichproben
aus verschiedenen Jahren und

④ 1995年12月1日以前竣工的已完工程。

$$5 = \text{Mg}^{2+} + 2\text{Cl}^{-}$$

IN STEPS ONE



rechter Kanal
RIGHT CHANNEL
CANAL DE DROIT

Wellenbereiche. FREQUENCY RANGES
GAMMES D'ONDES.

MW, PO	510 . . .	1620 kHz, kc,
KW1 SW1 OC1	19 . . .	5,7 MHz, Mc,
KW2 SW1 OC1	54 . . .	16,2 MHz, Mc,
LKW FM	87 . . .	108 MHz Mc

FM-Spülensatz, COIL SET, BLOC BOBINAGE
7435-074 ZF, IF = 10,7 MHz, Mc
AM-Spülensatz, COIL SET, BLOC BOBINAGE
7417-104 ZF, IF = 460 kHz, kc

ARCHIV  **WERKE GMBH FÜRTH (BAY.)**
Mandello 1/U / Locarno 1/U
[19-8034-3001/62]